

WHAT IS CLAIMED IS:

1. An auto-locking support structure constructed in a split base of a portable computer, said split base comprising a pivot joint at a top side thereof, a pivot hole axially disposed in parallel to said pivot joint, sliding
5 track means transversely extended between said pivot joint and said pivot hole, and at least one recessed retaining hole, the auto-locking support structure comprising:

a cover plate, said cover plate having a coupling portion pivoted to said pivot joint, and at least one retaining projection corresponding and
10 adapted to engage with said at least one recessed retaining hole;

a pivot shaft, said pivot shaft having a coupling end formed at one end thereof and pivoted to said pivot hole of said split base, a free end formed at an opposite end thereof, and at least one supporting bar perpendicularly extended from the periphery thereof between said coupling
15 end and said free end;

a spiral spring sleeved onto the coupling end of said pivot shaft, said spiral spring having a first end fixedly connected to said pivot shaft and a second end fixedly connected to said split base, said spiral spring adapted to impart a biasing force to rotate said pivot shaft along said pivot hole and to
20 impart an axial pre-stress to move said pivot shaft axially;

a link, said link having a top coupling end pivotally connected to a part of said cover plate beyond the coupling portion of said cover plate, and a bottom coupling end; and

a slide pivoted to the bottom coupling end of said link and movable

in said sliding track means of said split base, said slide having a beveled portion stopped against the free end of said pivot shaft.

2. The auto-locking support structure as claimed in claim 1, wherein said split base further comprises a top recess on the top side thereof and
5 adapted to accommodate said cover plate when said cover plate is turned and closed on said top recess of said split base.

3. The auto-locking support structure as claimed in claim 2, wherein said split base further comprises at least one receiving open chamber formed in said top recess and adapted to accommodate said at least one
10 supporting bar.

4. The auto-locking support structure as claimed in claim 1, wherein said sliding track means is a sliding groove formed in said split base and transversely extended between said pivot joint and said pivot hole.

5. The auto-locking support structure as claimed in claim 1, wherein
15 said split base further comprises an operation hole at the top side thereof; said pivot shaft further comprises an operation device provided at the periphery thereof and received in said operation hole.

6. The auto-locking support structure as claimed in claim 5, wherein said operation device comprises a seat provided at the periphery of said
20 pivot shaft, and an operation plate mounted on said seat.

7. The auto-locking support structure as claimed in claim 1, wherein said split base further comprises a keyboard at the top side thereof.